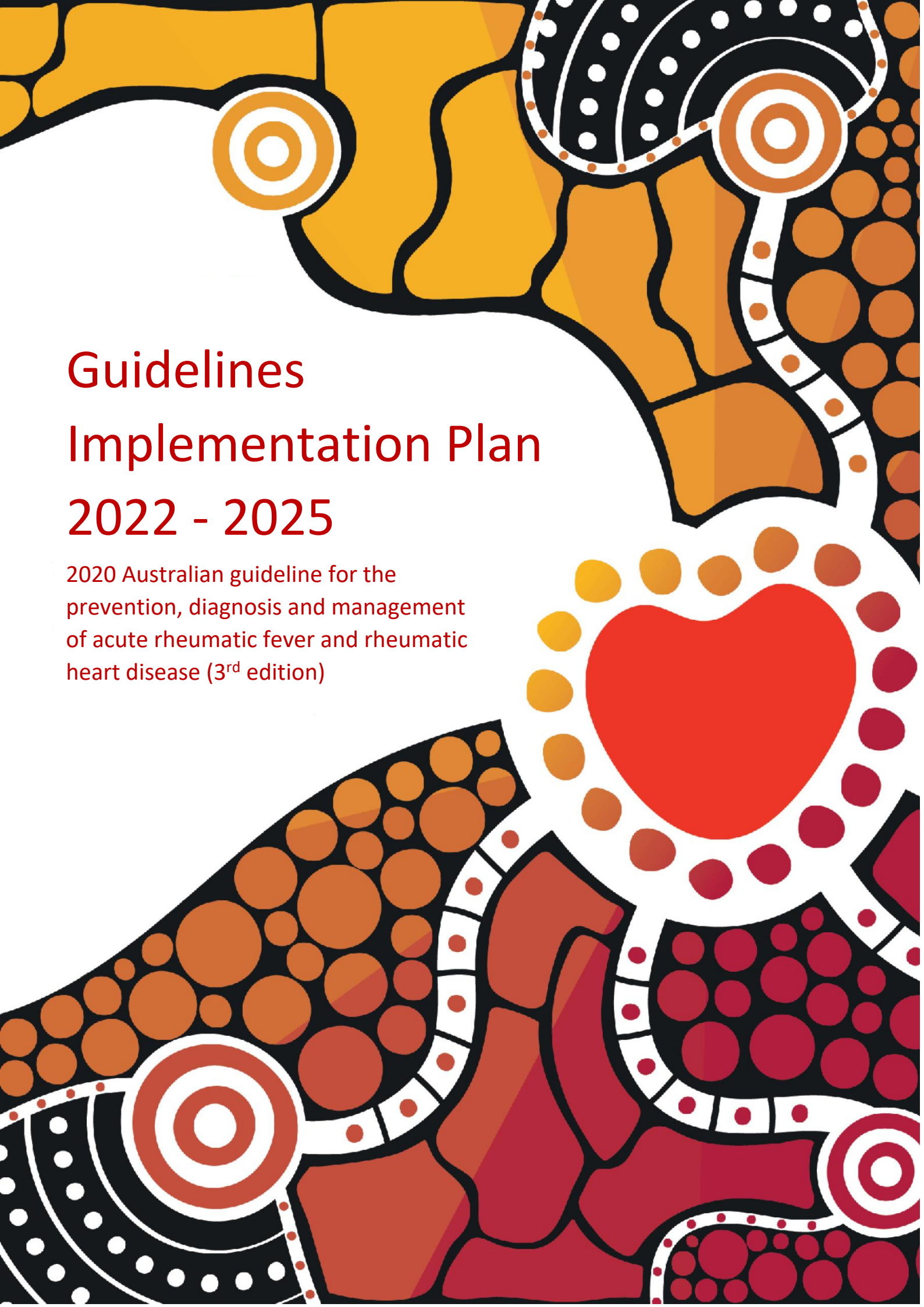
Guidelines Implementation Plan 2022 - 2025

2020 Australian guideline for the prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease (3rd edition)



Contents

Acronyms and Abbreviations

AIHW	Australian Institute of Health and Welfare
ARF	Acute rheumatic fever
BPG	Benzathine benzylpenicillin G
CARPA (HCM)	Central Australia Rural Practitioners Association (Health Care Manuals)
CHIS	Community Health Information System
CRANA	Council of Remote Area Nurses of Australia Inc
GRADE	Grading of Recommendations, Assessment, Development and Evaluations
Implementing Organisations	RHD Register and Control Programs, Public Health and Disease Surveillance Units, Environmental Health Units, primary, secondary and tertiary health care providers, peak and industry bodies (and their members).
KAMSC	Kimberley Aboriginal Medical Services Council
NHMRC	National Health and Medical Research Council
PCCM	Primary Clinical Care Manual
PCIS	Primary Care Information System
PHN	Primary Health Network
RHD	Rheumatic heart disease
RPHCM	Remote Primary Health Care Manuals
Strep A	Group A streptococcus
THOM	Tropical Health Orientation Manual
WBM	Women's Business Manual
WHF	World Heart Federation
WHO	World Health Organisation

1. Introduction

Evidence-based clinical practice guidelines are important for acute rheumatic fever (ARF) and rheumatic heart disease (RHD). These conditions are difficult to diagnose, are not commonly seen beyond the Aboriginal and Torres Strait Islander population in Australia, and they can have severe consequences for the people affected.

The 2020 Australian guideline for the prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease (3rd edition) (hereafter, *Guidelines*) was produced by RHDAustralia and published in February 2020 to help support clinical best practice. The document is available at https://www.rhdaustralia.org.au/arf-rhd-guidelines (hereafter, *the website*).

This Guidelines Implementation Plan (hereafter, *Plan*) outlines a systematic approach for supporting jurisdictions, healthcare providers, key organisations, and the community, to implement best practice messaging and care which is consistent with the Guidelines.

Menzies School of Health Research (hereafter, *Menzies*) supports implementing organisations, leads national promotion of the Guidelines, evaluates uptake of the Guidelines, identifies barriers to implementation, and collates and assesses emerging evidence to inform future updates.

The Plan describes

- the objectives of Guidelines implementation.
- Menzies' role to support implementation.
- existing and planned activities and strategies to raise awareness of the Guidelines and promote best practice consistent with its recommendations.
- recommended roles and responsibilities of organisations to implement recommendations.

2. The Guideline

Based on the 2012 edition, the 2020 Guidelines were written by Australian clinical and public health experts and researchers and policymakers and was developed in collaboration with key stakeholders and an Aboriginal and Torres Strait Islander advisory group. The Guidelines provide national standards, recommendations and guidance for the prevention, diagnosis, and management of ARF and RHD that are clinically sound and culturally safe.

Key information is presented as *standards of care* (e.g., in line with international standards), as *best practice recommendations* (evidence-based), or as *guidance* (recommended process for providing care).

Following the 2012 edition the 2020 Guidelines reflect new and emerging evidence and consumer feedback. This includes a focus which places people, families, and communities (culture) at the centre of care.

2020 Guideline chapters:

1. Introduction (including summary of changes from previous edition)
2. Culture and Workforce
3. Burden of acute rheumatic fever and rheumatic heart disease
4. Primordial prevention and social determinants of health
5. Primary prevention
6. Diagnosis of acute rheumatic fever
7. Management of acute rheumatic fever
8. Diagnosis of rheumatic heart disease
9. Screening for rheumatic heart disease
10. Secondary prophylaxis
11. Management of rheumatic heart disease
12. Women and girls with rheumatic heart disease
13. Rheumatic heart disease control programs
14. New technologies

A Guidelines Development Framework provides a full summary of the development process in line with the NHMRC Standards for Guidelines.

3. The Plan

3.1 Objective

Guideline implementation aims to increase awareness and understanding of best practice ARF and RHD prevention, diagnosis, and management among the Australian health workforce by reducing variation in clinical practice which is not evidence-based and/or does not align with best practice, by facilitating access for health service organisations to the Guidelines and other relevant documents, and by developing frameworks to support the sustainability of an evidence-based Guidelines.

3.2 Scope

The scope of this Plan is to describe the activities, strategies, and responsibilities to implement the standards and recommendations in the 2020 Guidelines.

The Plan does not quantify costs and workforce capacity needed to implement Guideline standards and recommendations; however, it does acknowledge resource or other constraints (e.g., conflict with local protocols) that impact effective implementation.

4. Guideline Implementation

4.1 Roles & responsibilities

Implementing organisations and relevant individuals are responsible for updating and aligning local policies, systems, and practice (where applicable) which is consistent with Guideline recommendations, and for promoting uptake of the recommendations and maintaining a skilled local healthcare workforce. Implementing organisations and individuals are also responsible to identify and address local barriers to providing best practice care.

Standards, recommendations, and clinical guidance should be interpreted within the context of local legislation and individual clinical scenarios. It is both necessary and important that regional and local strategies comply with relevant legislation and policy and be responsive to contextual issues.

Menzies implements the Guidelines by

- disseminating among stakeholders to raise awareness of its purpose and content.
- conducting and supporting workforce education and training which accurately reflects its content.
- developing and disseminating clinical resources which accurately reflect its content.
- supporting implementing organisations and individuals to disseminate the Guidelines, provide workforce training, develop clinical resources, and evaluate activities.
- evaluating and monitoring relevant activities.

4.2 Completed and continuing activities

Completed activities

- Printed document distribution and link to web-based document
- Guideline app and ARF diagnosis calculator updated
- Key information in the Guidelines extracted and highlighted
- eLearning programs updated

Continuing activities

- Supported updates to the other local and national clinical practice manuals and protocols.
- Requests for support monitored and managed.

4.3 Implementation priorities and other planned activities

Clinical implementation priorities

Six elements have been identified as priorities for national implementation:

1. Pharmacological treatment of Strep A skin sore and throat infections.
2. Criteria for ARF diagnosis.
3. Management of suspected ARF.
4. Criteria for RHD diagnosis on echocardiogram.
5. Secondary prophylaxis of ARF.
6. Pharmacological prophylaxis of bacterial endocarditis.

A plan (Appendix 1) has been developed to support implementing organisations and individuals to address and implement the priority elements and evaluate success.

5. Evaluation and Monitoring

5.1 Monitoring Guideline dissemination activity

Menzies monitors activity including:

- the number of electronic Guidelines downloaded from the website.
- the number of summary and supplementary documents downloaded from the website.
- app download and usage.
- the number of self-paced eLearning programs completed.
- the number of people attending education and training workshops.

5.2 Monitoring implementation of Guideline standards and recommendations

Menzies has established relationships with jurisdictional RHD Control Programs and peak and professional bodies. Through these relationships, successes and barriers to Guideline implementation and uptake are monitored, particularly related to the elements in Appendix 1.

5.3 Guideline update & addendum process

National and international evidence related to ARF and RHD is reviewed regularly to ensure that the Guidelines align with best practice. Menzies

- oversees a robust and transparent review and consultation process. (Figure 1)
- identifies and convenes relevant content experts to provide a review of new and emerging evidence related to the prevention, diagnosis, and management of ARF and RHD.

- considers the implementation of any new recommendations and implications for practice and policy.
- updates content (and include version history).
- communicates and disseminates new content.

Content expert groups

Content expert group members vary depending on the nature and content of the new or emerging evidence. At a minimum, a group includes Menzies clinical and management staff, relevant 2020 Guideline authors, research authors and investigators (where possible), and other, notable expert as indicated. The initial membership is decided by Menzies with additional members identified or recommended by the expert group.

Consultation and consensus

Content expert groups review evidence and agree whether the evidence supports an update to the Guidelines. Where the evidence warrants an update, a draft recommendation is developed for consultation with a broader group. This includes consultation on the implementation of a new recommendation, e.g., implications for practice and policy and any risks and challenges, and whether the recommendation is actionable (NHRMC Standard 7). Consultation may also include consumers (people with lived experience of ARF and/or RHD) and policy makers.

The review process is documented, and where indicated the rationale for new content is published alongside the updated Guidelines.

If evidence is significant but does not warrant change, Menzies may publish a fact sheet or position paper commenting on the evidence and decision not to recommend an update.

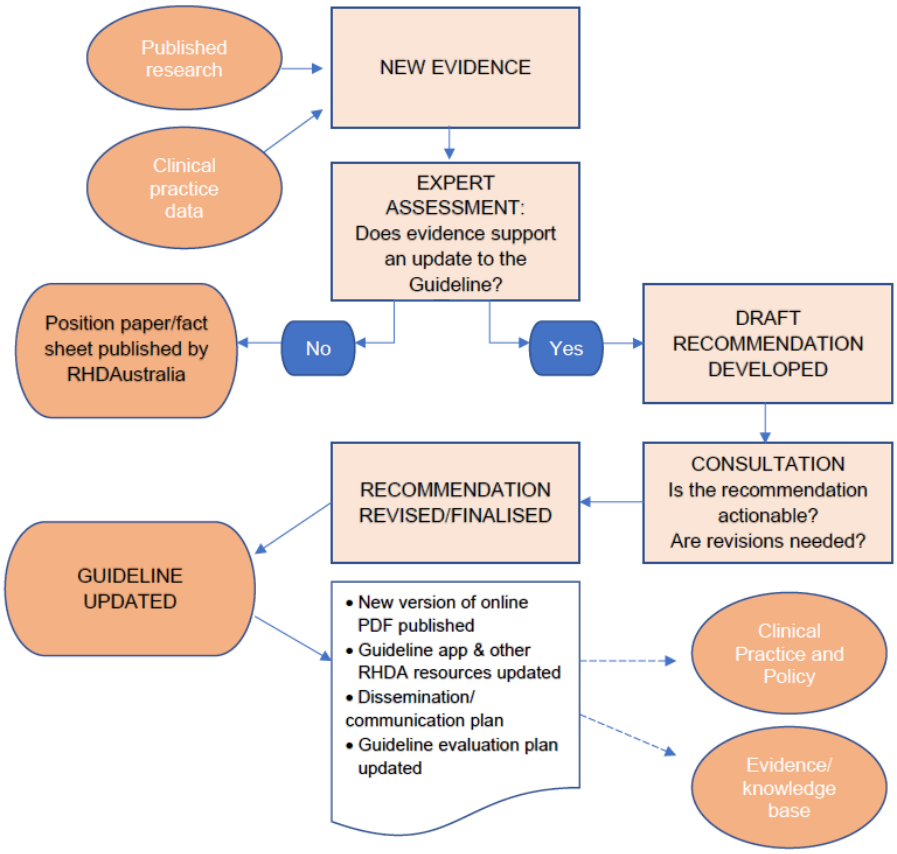


Figure 1. Process for updating the Guideline.

Communicating Updates

Menzies communicates new information through the following process:

1. Changes are included in the electronic Guidelines (PDF) available on the website. A version history table includes version number, date, and summary of changes.
2. Apps and education materials are updated to include the changes where indicated.
3. Additional position papers and fact sheets addressing contentious issues and high priority topics are published on the website.
4. Changes (including relevant documents) are communicated directly to implementing organisations and individuals, and other guideline developers.
5. The consultation and consensus processes are documented, and implementation is monitored and evaluated.

Appendix 1: Implementation and evaluation of priority standards and recommendations

1. TREATMENT OF STREP A INFECTIONS					
Strength of recommendation	**Context**	**2020 Guideline references**	**Target/Audience**	**Activity/Strategy**	**Evaluation**
BEST PRACTICE	Skin sore assessment and management for high-risk individuals Sore throat assessment and management for high-risk individuals	Table 5.2. Recommended antibiotic treatment for Strep A sore throat / tonsillitis (p57) Table 5.3. Recommended antibiotic treatment for Strep A skin sores (p58) **Supplementary information** Table 5.1 Risk groups for primary prevention of ARF (p57) Table 5.4. Symptoms and signs of a sore throat / tonsillitis (p61) Figure 5.3. Assessment for sore throat (p62)	Primary healthcare staff Jurisdictional ARF/RHD registers Primary Health Care software (PCIS, Best Practice, Communicare, CHIS, Ferret) PHNs	Workforce education and training Electronic record systems updated (e.g., Health Information Pathways, practice, and prescribing software) Clinical practice guidelines and protocols updated (Therapeutic guidelines, PCCM, CARPA HCMs, RPHCM, WBM, Australian Medicines Handbook, THOM, KAMSC protocols) Existing and new locally produced resources aligned or updated (as indicated) Dissemination through peak and industry bodies Newsletter and journal articles published with peer representatives	Clincial practice adopted in primary care settings, evaluated through stakeholder surveys Local and national protocols align with the Guidelines
2. MANAGING SUSPECTED ARF					
Strength of recommendation	**Context**	**2020 Guideline references**	**Target/Audience**	**Activity/Strategy**	**Evaluation**
BEST PRACTICE	Hospital admission for all people with suspected and confirmed ARF. Echocardiography for all suspected and confirmed ARF. Culturally safe care (family engagement, interpreters, Aboriginal Health	Anyone suspected to have ARF should be admitted to a hospital within 24-72 hours for echocardiography and specialist review. (p72) Echocardiogram can enable a confirmation of ARF by demonstrating carditis which may not be clinically evident. It is also used to establish a baseline of cardiac status, and to determine whether valve damage is present	Primary care health staff Tertiary care health staff including paediatricians, physicians, cardiologists, cardiac sonographers.	Workforce education and training Clinical practice guidelines and protocols updated (Therapeutic guidelines, PCCM, CARPA HCMs, RPHCM, WBM, Australian Medicines Handbook, THOM, KAMSC protocols) Existing and new locally produced resources aligned or updated (as indicated) Dissemination through peak and industry bodies Newsletter and journal articles published with peer representatives	RHD register audits of ARF notifications with associated hospitalisation and echocardiogram Local and national protocols align with the Guidelines

	Practitioner involvement in delivery of care, advice about prognosis and management)	and if so, to determine the severity. (p72) Cultural considerations are central (p2)			
3. CRITERIA FOR ARF DIAGNOSIS					
Strength of recommendation	**Context**	**2020 Guideline references**	**Target/Audience**	**Activity/Strategy**	**Evaluation**
INTERNATIONAL STANDARD *(Aligned with American Heart Association 2015 criteria)*	Diagnosis (classification) of ARF by risk group as: • definite ARF (confirmed) • probable ARF (highly suspected) • possible ARF (uncertain) • definite ARF recurrence • probable ARF recurrence • possible ARF recurrence	Table 6.2. 2020 Updated Australian criteria for ARF diagnosis (p74) Table 6.1. Risk groups for ARF (p73) **Supplementary Information** Table 6.3. Suggested upper limits of normal for serum streptococcal antibody titres in children and adults (p75) Table 6.4. Upper limits of normal for P-R interval (p75) Table 6.10 Minimal echocardiographic criteria to allow a diagnosis of pathological valvular regurgitation (p95)	Primary and tertiary healthcare staff Jurisdictional ARF/RHD registers Public Health / Disease Control Units AIHW (national reporting) Jurisdiction electronic health record systems Primary Health Care software (PCIS, Best Practice, Communicare, CHIS, Ferret) PHNs	Updates to: • ARF diagnosis app • ARF notification forms • Jurisdictional ARF/RHD registers Disseminate ARF diagnosis app and other updates through peak and industry bodies Electronic health record systems updated (e.g., Health Information Pathways, practice, and prescribing software) Clinical practice guidelines and protocols updated (Therapeutic guidelines, PCCM, CARPA HCMs, RPHCM, WBM, Australian Medicines Handbook, THOM, KAMSC protocols) Newsletter and journal articles published with peer representatives	Relevant electronic records (including registers) reflect international ARF criteria. Local and national protocols align with the Guidelines Jurisdiction and national reports describe ARF according to international criteria
4. CRITERIA FOR RHD DIAGNOSIS					
Strength of recommendation	**Context**	**2020 Guideline references**	**Target/Audience**	**Activity/Strategy**	**Evaluation**
INTERNATIONAL STANDARD	WHF echocardiogram criteria for RHD diagnosis	Table 8.5. 2012 World Heart Federation criteria for echocardiographic diagnosis of RHD (p135) **Supplementary information**	Medical specialists, cardiologists, cardiac sonographers	Accredited education sessions delivered by peers Disseminate information through peak and industry bodies Clinical practice guidelines and protocols updated (Therapeutic guidelines, PCCM, CARPA HCMs,	Relevant electronic records (including registers) reflect international RHD diagnostic criteria

		Box 8.1. Echocardiography machine settings (p135) Table 8.2. Echocardiographic features of RHD (p132) Table 8.4. Morphological features of RHD (p134)		RPHCM, WBM, Australian Medicines Handbook, THOM, KAMSC protocols) Newsletter and journal articles published with peer representatives	Local and national protocols align with the Guidelines Relevant cardiac sonography guidelines and training materials align with the Guidelines
5. SECONDARY PREVENTION OF ARF					
Strength of recommendation	**Context**	**2020 Guideline references**	**Target/Audience**	**Activity/Strategy**	**Evaluation**
NATIONAL STANDARD	Secondary prophylaxis treatment to prevent recurrent ARF	Table 10.1. Recommended antibiotic regimens for secondary prophylaxis (166)	Primary and tertiary healthcare staff Jurisdictional RHD Control Program programs (RHD registers) Public Health / Disease Control Units AIHW (national reporting) Jurisdiction electronic record systems Primary Health Care software (PCIS, Best Practice, Communicare, CHIS, Ferret) PHNs	Updates to: • ARF diagnosis app • ARF notification forms • Jurisdictional ARF/RHD registers Disseminate the diagnosis app and other updates through peak and industry bodies Electronic record systems updated (e.g. Health Information Pathways, practice and prescribing software)	Relevant electronic records (including registers) and national reports reflect national standard for secondary prophylaxis delivery
BEST PRACTICE	Duration of secondary prophylaxis	Table 10.2. Recommended duration of secondary prophylaxis (p168-9)			Relevant electronic records (including registers) reflect recommended duration of secondary prophylaxis delivery.

6. PHARMACOLOGICAL PREVENTION OF BACTERIAL ENDOCARDITIS					
Strength of recommendation	**Context**	**2020 Guideline references**	**Target/Audience**	**Activity/Strategy**	**Evaluation**
NATIONAL STANDARD	Antibiotic prophylaxis to prevent endocarditis	Table 11.6. Antibiotics for infective endocarditis prophylaxis (p224) **Supplementary information** Table 11.5. Cardiac conditions and procedures for which infective endocarditis prophylaxis is recommended (p223)	Primary healthcare staff Dental and surgical staff Jurisdictional ARF/RHD registers Primary Health Care software (PCIS, Best Practice, Communicare, CHIS, Ferret) PHNs	Workforce education and training Electronic record systems updated (e.g., Health Information Pathways, practice, and prescribing software) Clinical practice guidelines and protocols updated (Therapeutic guidelines, PCCM, CARPA HCMs, RPHCM, WBM, Australian Medicines Handbook, THOM, KAMSC protocols) Existing and new locally produced resources aligned or updated (as indicated) Dissemination through peak and industry bodies Newsletter and journal articles published with peer representatives	Clincial and dental practice adopted, evaluated through stakeholder surveys Local and national protocols align with the Guidelines